

# Work Order ID 102013

May-22-13 1:28:28 PM

**\*102013\***

Page 1

Item ID: D205-633-022

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Heli Access Step RH High Gear

Start Date: 5/22/13 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 6/05/13 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-05-22 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9300	Rev B								
100	DOCUMENT CONTROL	0.00							
<b>*100*</b>									
DC	Memo <u>M.D.</u>	0.00							
Document Control	Photocopy bluefile & type labels per PPPD205-633-022								
110	Pick Kit	0.00							
<b>*110*</b>									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
<b>*120*</b>									
QC	Memo	0.00							
Quality Control									

**DAS**  
**27**  
**28**

**B723**

**2**

**DAS**  
**27**  
**28**

**B723**

**2x**

**M.D. 13-07-18**

**2**

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Work Order ID 102013

May-22-13 1:28:28 PM

\*102013\*

Page 2

Item ID: D205-633-022

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Heli Access Step RH High Gear

Start Date: 5/22/13 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 6/05/13 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*  
Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
*130*	Packaging					2	3/7/24	50	2
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D205-633-021 Location <u>670</u> PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
*140*									
QC	Memo	0.00							
Quality Control									

MCJ 13-07-26

AB-07-25

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other -									
Process									
Supplier									
Training									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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# Picklist Print

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Page 1

Work Order ID: 102013

\*102013\*

Parent Item: D205-633-022

\*D205-633-022\*

Parent Item Name: Heli Access Step RH High Gear

Start Date: 5/22/13

Required Date: 6/05/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:B Added D2565-111 05-09-09 KJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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AN4-11A		Purchased	No			110	Each	155.0000	1	2			
---------	--	-----------	----	--	--	-----	------	----------	---	---	--	--	--

\*AN4-11A\*

Bolt

\*\*

M.D. 13-07-18

## Location

## Loc Qty

## Loc Code

FG	20	
120731	20	
ST514	50	
123900	50	
ST517	85	
124221	85	

2x

AN4-14A

Purchased

No

110

Each

654.0000

\*AN4-14A\*

Bolt

\*\*

M.H.D.

## Location

## Loc Qty

## Loc Code

FG	5	
122141	5	
ST007	16	
121349	16	
ST357	13	
115374	1	
123352	12	
ST514	20	
124215	20	
ST517	600	
124221	600	

2x

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		

# Picklist Print

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Page 2

Work Order ID: 102013

Parent Item: D205-633-022

Parent Item Name: Heli Access Step RH High Gear

\*102013\*

\*D205-633-022\*

Start Date: 5/22/13

Required Date: 6/05/13

Start Qty: 2.00

Required Qty: 2.00

AN44-7A

Purchased

No

110

Each

9.0000

**\*AN44-7A\***

Eyebolt

SHB 2

Location

Loc Qty

Loc Code

ST361

9

112454

9

110

Each

364.0000

AN4-5A

Purchased

No

**\*AN4-5A\***

Bolt

SHB 2

Location

Loc Qty

Loc Code

ST355

177

120562

177

ST514

187

120562

187

110

Each

1,687.000

AN4-6A

Purchased

No

**\*AN4-6A\***

Bolt

SHB 2

Location

Loc Qty

Loc Code

ST514

1687

123355

1687

110

Each

73.0000

AN4-7A

Purchased

No

**\*AN4-7A\***

Bolt

SHB 2

Location

Loc Qty

Loc Code

ST355

73

123352

5

124215

68

May-22-13 1:28:32 PM

Shop Packet Print

Page 2

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions  <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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# Picklist Print

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Page 3

Work Order ID: 102013

Parent Item: D205-633-022

Parent Item Name: Heli Access Step RH High Gear

\*102013\*

\*D205-633-022\*

Start Date: 5/22/13

Required Date: 6/05/13

Start Qty: 2.00

Required Qty: 2.00

AN5-14A Purchased No

**\*AN5-14A\***

Bolt

110 Each 120.0000

\*\*

2

M.D. 13-07-18

## Location

## Loc Qty

## Loc Code

ST362

120

122416

20

M125716

100

AN960JD416 NAS1149D0463J Purchased No

110 Each 0.0000

\*\*

2x

32

126221

M.D.

**\*AN960JD416\***

Washer

AN960JD516 NAS1149D0563J Purchased No

110 Each 2.0000

\*\*

6

125807

M.D.

**\*AN960JD516\***

Washer

## Location

## Loc Qty

## Loc Code

ST504

2

1069059

2

D2022-101 Manufactured No

110 Each 179.0000

\*\*

8

M.D.

**\*D2022-101\***

Spacer

## Location

## Loc Qty

## Loc Code

ST004

179

100480

60

92861

33

97235

26

98450

60

B101748(4x)

4x

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%; border: none;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
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Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Picklist Print

May-22-13 1:28:32 PM

Page 4

Work Order ID: 102013

Parent Item: D205-633-022

Parent Item Name: Heli Access Step RH High Gear

\*102013\*

\*D205-633-022\*

Start Date: 5/22/13

Required Date: 6/05/13

Start Qty: 2.00

Required Qty: 2.00

D2022-103

Manufactured No

110

Each

91.0000

~~\*D2022-103\*~~

Spacer

SMB 2

## Location

## Loc Qty

## Loc Code

ST004

91

85813

56

98274

35

D2562-011

Manufactured No

110

Each

7.0000

~~\*D2562-011\*~~

Strut

SMB 2

## Location

## Loc Qty

## Loc Code

ST252

7

53605

2

76076

5

D2565-101

Manufactured No

110

Each

10.0000

~~\*D2565-101\*~~

Strut

SMB 2

## Location

## Loc Qty

## Loc Code

ST252

10

100778

10

D2565-103

Manufactured No

110

Each

3.0000

~~\*D2565-103\*~~

Strut

SMB

## Location

## Loc Qty

## Loc Code

ST252

3

86383

3

2  
4  
\*\*

11.10.13-07-18

4x  
2  
\*\*

11.10

1x  
1x  
2  
\*\*

11.10

1x  
1x  
2  
\*\*

1x B102338

1x

11.10

B99617 (1x)

1x B 102359 sp

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%; border: none;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
---	---	---	---

# Picklist Print

May-22-13 1:28:32 PM

Page 5

Work Order ID: 102013

Parent Item: D205-633-022

Parent Item Name: Heli Access Step RH High Gear

\*102013\*

\*D205-633-022\*

Start Date: 5/22/13

Required Date: 6/05/13

Start Qty: 2.00

Required Qty: 2.00

D2565-105

Manufactured No

110

Each

11.0000

~~\*D2565-105\*~~

Strut

SHD 2x

## Location

## Loc Qty

## Loc Code

ST252

11

99734

11

110

Each

13.0000

D2565-107

Manufactured No

~~\*D2565-107\*~~

Strut

SHD 2x

## Location

## Loc Qty

## Loc Code

ST252

13

97602

3

99815

10

110

Each

11.0000

D2565-109

Manufactured No

~~\*D2565-109\*~~

Strut

SHD 2x

## Location

## Loc Qty

## Loc Code

ST252

11

94692

6

99735

5

110

Each

3.0000

D2565-111

Manufactured No

~~\*D2565-111\*~~

Strut

SHD 2x

## Location

## Loc Qty

## Loc Code

ST252

3

97566

3

Start Date: 5/22/13  
Start Qty: 2.00  
\*\*

Start Date: 5/22/13  
Start Qty: 2.00  
\*\*

Start Date: 5/22/13  
Start Qty: 2.00  
\*\*

Start Date: 5/22/13  
Start Qty: 2.00  
\*\*

M.D. 13-07-18  
1XB1029538p

M.D.

M.D.

M.D.

B01207

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
---	---	---

<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Other _____ _____ _____
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# Picklist Print

May-22-13 1:28:32 PM

Page 6

Work Order ID: 102013

Parent Item: D205-633-022

Parent Item Name: Heli Access Step RH High Gear

\*102013\*

\*D205-633-022\*

Start Date: 5/22/13

Required Date: 6/05/13

Start Qty: 2.00

Required Qty: 2.00

D3437-041

Manufactured No

110

Each

3.0000

~~\*D3437-041\*~~

Aft Strut Assembly

SHB 20

Location

Loc Qty

Loc Code

ST487

3

100829

1

99645

2

\*\*  (2)

M.D. 13-07-18

B102386(2x)

D3438-042

Manufactured No

110

Each

0.0000

~~\*D3438-042\*~~

Step Weldment Assembly

MS21042L4

Purchased

No

110

Each

3,021.000

~~\*MS21042L4\*~~

Nut

SHB 20

Location

Loc Qty

Loc Code

FP001

50

122452

38

8182

12

st507

2709

125535

2709

ST514

262

124231

262

\*\*  (2)

102014

\*\*  (8) (16)

M.D.

126073

MS21042L5

Purchased

No

110

Each

2,097.000

~~\*MS21042L5\*~~

Nut

SHB 20

Location

Loc Qty

Loc Code

ST314

1000

125654

1000

ST506

97

123900

97

st507

1000

125535

1000

\*\*  (2) (4)

M.D.

4x

May-22-13 1:28:32 PM

Shop Packet Print

Page 6

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other



**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9300	REV. B SHEET 1 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS
A	05.05.05	NEW ISSUE	
B	05.08.12	ADD STRUTS IF TANK REMOVED	

## DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D205-633 REV. A

REF. CANADIAN STC: SH96-57

REF. FAA STC: SR00592NY, SR00593NY, SR00594NY

THE PURPOSE OF THIS SERVICE INSTRUCTION IS TO ADD THE D205-633-021/-022/-023/-024/-025/-026 STEPS TO ADDRESS COMPATABILITY WITH THE SIMPLEX MODEL 304 FIRE ATTACK TANK. D205-633-021/-022 ARE IDENTICAL TO D205-633-011, EXCEPT AS SHOWN HERE. D205-633-023/-024 ARE IDENTICAL TO D205-633-013, EXCEPT AS SHOWN HERE. D205-633-025/-026 ARE IDENTICAL TO D205-633-015, EXCEPT AS SHOWN HERE.

NOTE THAT THE STRUTS REQUIRED TO INSTALL THE STEPS ON THE LOWER AFT HARDPOINT HAVE ALSO BEEN INCLUDED WITH THE KITS IN CASE THE TANK IS REMOVED FOR ANY REASON. THESE STRUTS SHOULD BE INSTALLED I.A.W. IIN-D205-633, EXCEPT REPLACE EYEBOLT WITH AN4 BOLT ON LOWER HARDPOINT. ALSO NOTE THAT IF THE THREADS PROTRUDE THROUGH THE BAR ON THE D3437-XXX STRUT ASSEMBLIES AFTER ADJUSTMENT THEY MAY BE TRIMMED OFF.

### WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D205-633-021 <b>HELI-ACCESS-STEP™</b>	14.0 lb 6.35 kg	-50.0 in -1.27 m	-700 in lb -8.06 m kg	94.5 in 2.40 m	1323 in lb 15.24 m kg
D205-633-022 <b>HELI-ACCESS-STEP™</b>	13.2 lb 6.00 kg	+50.0 in +1.27 m	+660 in lb +7.62 m kg	94.5 in 2.40 m	1247 in lb 14.40 m kg
D205-633-023 <b>HELI-ACCESS-STEP™</b>	14.3 lb 6.50 kg	-50.0 in -1.27 m	-715 in lb -8.26 m kg	94.5 in 2.40 m	1351 in lb 15.6 m kg
D205-633-024 <b>HELI-ACCESS-STEP™</b>	13.5 lb 6.14 kg	+50.0 in +1.27 m	+675 in lb +7.80 m kg	94.5 in 2.40 m	1276 in lb 14.74 m kg
D205-633-025 <b>HELI-ACCESS-STEP™</b>	14.6 lb 6.64 kg	-50.0 in -1.27 m	-730 in-lb -8.43 m-kkg	94.5 in 2.40 m	1380 in-lb 15.94 m-kkg
D205-633-026 <b>HELI-ACCESS-STEP™</b>	13.8 lb 6.27 kg	+50.0 in +1.27 m	+690 in-lb +7.96 m-kkg	94.5 in 2.40 m	1304 in-lb 15.05 m-kkg

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**BY: *[Signature]*  
D. SHEPHERD (DE # 02)DATE: 05.08.12  
CERT. NO.: SH96-57  
ISSUE NO.: #5

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DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. DSI 9300	REV. B SHEET 2 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP SCALE NTS	

### PARTS LIST

QTY -021	QTY -022	QTY -023	QTY -024	QTY -025	QTY -026	Part Number	Description
X						D205-633-021	Heli-Access-Step™ (LH), High Gear
	X					D205-633-022	Heli-Access-Step™ (RH), High Gear
		X				D205-633-023	Heli-Access-Step™ (LH), Extended High Gear (31")
			X			D205-633-024	Heli-Access-Step™ (RH), Extended High Gear (31")
				X		D205-633-025	Heli-Access-Step™ (LH), Extended High Gear (39")
					X	D205-633-026	Heli-Access-Step™ (RH), Extended High Gear (39")
4	4	4	4	4	4	D2022-101	SPACER
2	2	2	2	2	2	D2022-103	SPACER
				1	1	D2562-005	STRUT
1	1					D2562-011	STRUT
		1	1			D2562-013	STRUT
1		1		1		D2563	WELDMENT ASSEMBLY
				*1	*1	D3165-1	STRUT
1	1					D2565-101	STRUT
1	1					D2565-103	STRUT
1	1					D2565-105	STRUT
1	1					D2565-107	STRUT
1	1					D2565-109	STRUT
*1	*1					D2565-111	STRUT
		1	1			D2565-201	STRUT
		1	1			D2565-203	STRUT
		1	1			D2565-205	STRUT
		1	1			D2565-207	STRUT
		1	1			D2565-209	STRUT
		*1	*1			D2565-211	STRUT
				1	1	D2565-301	STRUT
				1	1	D2565-303	STRUT
				1	1	D2565-305	STRUT
				1	1	D2565-307	STRUT
				1	1	D2565-309	STRUT
1	1					D3437-041	AFT STRUT ASSEMBLY
		1	1			D3437-043	AFT STRUT ASSEMBLY
				1	1	D3437-045	AFT STRUT ASSEMBLY
	1		1		1	D3438-042	WELDMENT ASSEMBLY
1	1	1	1	1	1	AN4-5A	BOLT
4	4	3	3	3	3	AN4-6A	BOLT
1	1	1	1	1	1	AN4-7A	BOLT
1	1					AN4-11A	BOLT
		1	1	1	1	AN4-12A	BOLT
1	1	1	1	1	1	AN4-14A	BOLT
1	1	1	1	1	1	AN44-7A	EYEBOLT
1	1	1	1	1	1	AN5-14A	BOLT
16	16	14	14	14	14	AN960JD416	WASHER
3	3	3	3	3	3	AN960JD516	WASHER
8	8	7	7	7	7	MS21042L4	NUT (or MS21042-4)
2	2	2	2	2	2	MS21042L5	NUT (or MS21042-5)

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-Q-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: 05.08.12  
CERT. NO.: SH96-57  
ISSUE NO.: #5

\* ONLY INSTALLED IF TANK IS REMOVED

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102013

**DART**

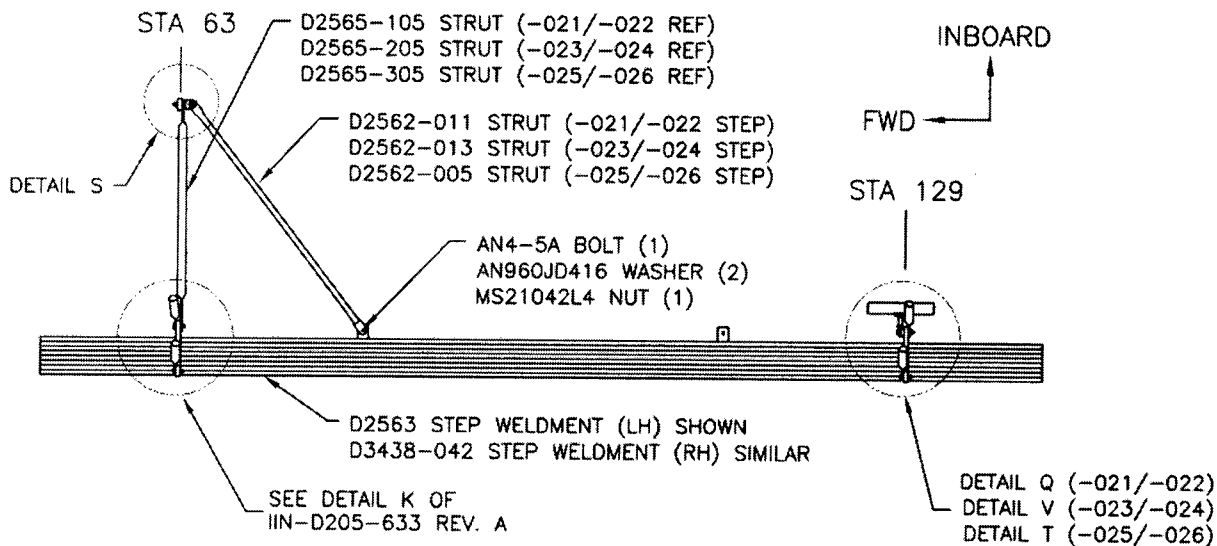
DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. DSI 9300	REV. B 3 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP KIT	SCALE NTS

**INSTALLATION OF D205-633-021/-022/-023/-024/-025/-026**

INSTALL D205-633-021/-022 AS PER THE D205-633-011 STEP OF INSTALLATION INSTRUCTIONS IIN-D205-633 REV.A, EXCEPT REPLACE D2565-111 STRUT WITH THE D3437-041 AFT STRUT ASS'Y, REMOVE D2562-001 STRUT, INSTALL D2562-011 STRUT AS SHOWN.

INSTALL D205-633-023/-024 AS PER THE D205-633-013 STEP OF INSTALLATION INSTRUCTIONS IIN-D205-633 REV.A, EXCEPT REPLACE D2565-211 STRUT WITH THE D3437-043 AFT STRUT ASS'Y, REMOVE D2562-003 STRUT, INSTALL D2562-013 STRUT AS SHOWN.

INSTALL D205-633-025/-026 AS PER THE D205-633-015 STEP OF INSTALLATION INSTRUCTIONS IIN-D205-633 REV.A, EXCEPT REPLACE D3165-1 SUPPORT ARM WITH THE D3437-045 AFT STRUT ASS'Y AS SHOWN.

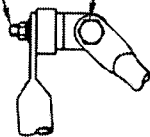


**D205-633-021/-023/-025 SHOWN.**  
**D205-633-022/-024/-026 SIMILAR**  
(VIEW LOOKING DOWN)

AN44-7A EYEBOLT (1)  
AN960JD516 WASHER (1)  
MS21042L5 NUT (1)

AN4-6A BOLT (1)  
AN960JD416 WASHER (2)  
MS21042L4 NUT (1)

**DETAIL S**  
NOT TO SCALE



CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY:   
D. SHEPHERD (DE # 02)

DATE: 05.08.12  
CERT. NO.: SH96-57  
ISSUE NO.: #5

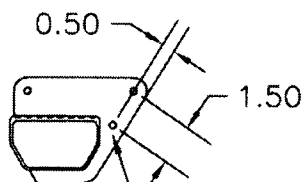
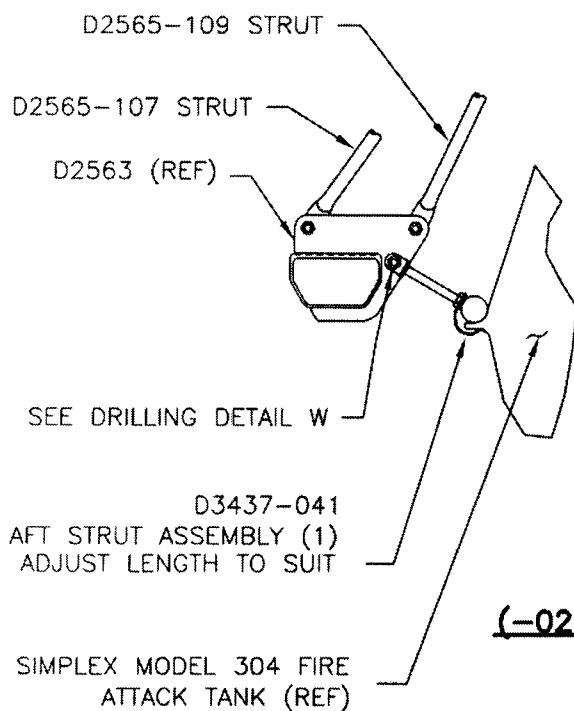
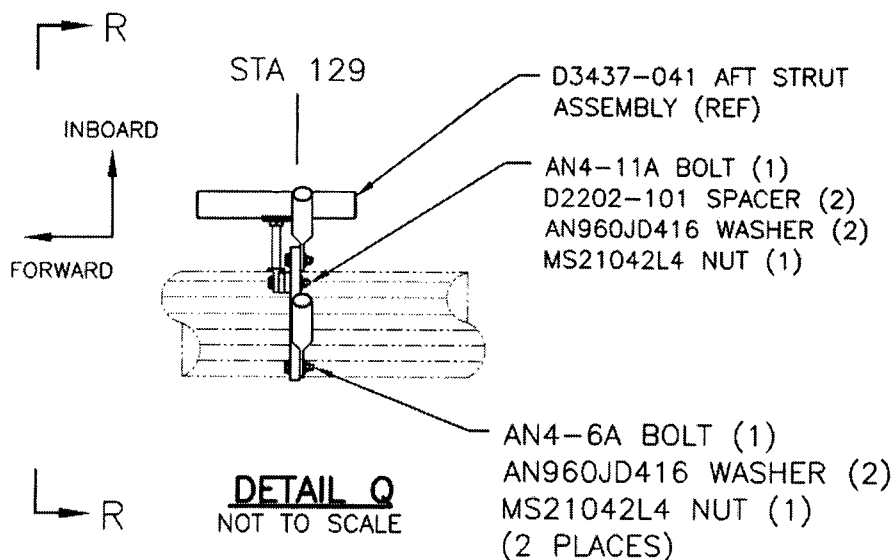
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9300	REV. B SHEET 4 OF 6
DATE 05.08.12	TITLE SIMPLEX TANK STEP		SCALE NTS



**(-021/-022 STEP)**

**VIEW R-R**  
NOT TO SCALE

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED <i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
DATE:	05.08.12
CERT. NO.:	SH96-57
ISSUE NO.:	#5

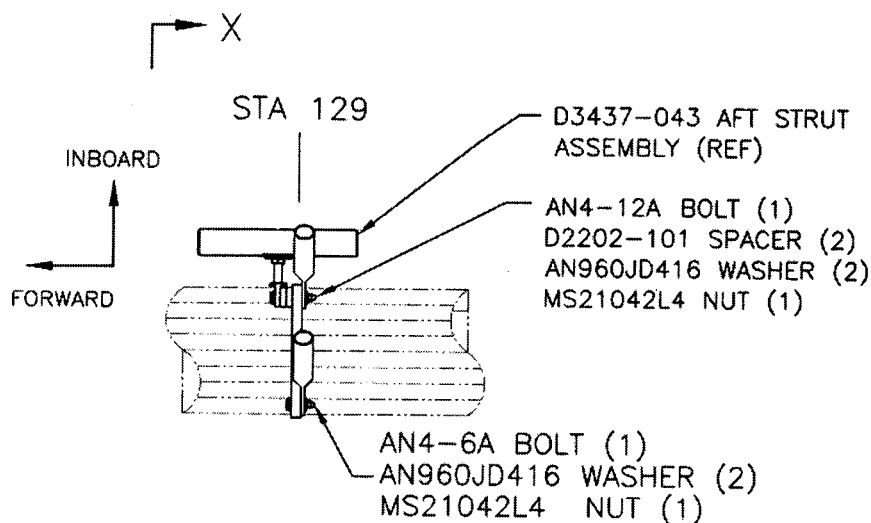
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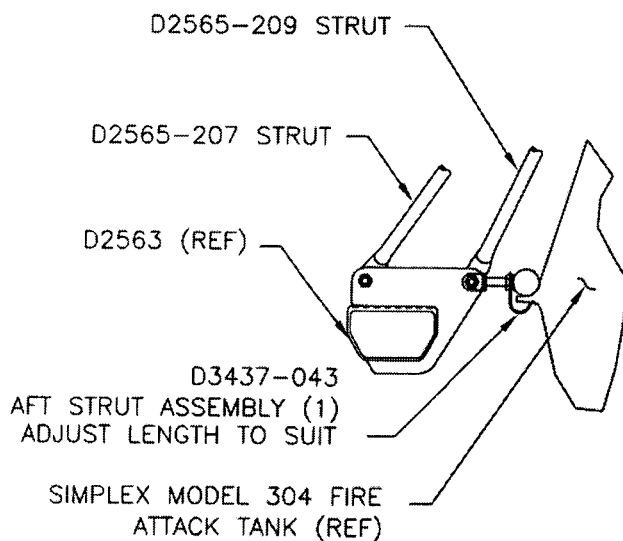
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**DART**

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DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS



**DETAIL V**  
NOT TO SCALE



**(-023/-024 STEP)**

**VIEW X-X**  
NOT TO SCALE

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
<b>APPROVED</b> <i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
DATE:	05.08.12
CERT. NO.:	SH96-57
ISSUE NO.:	#5

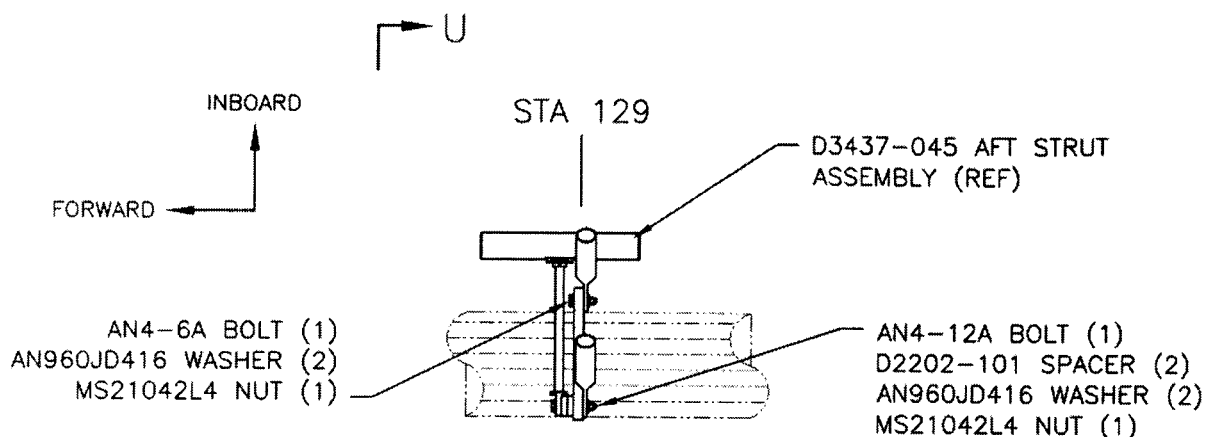
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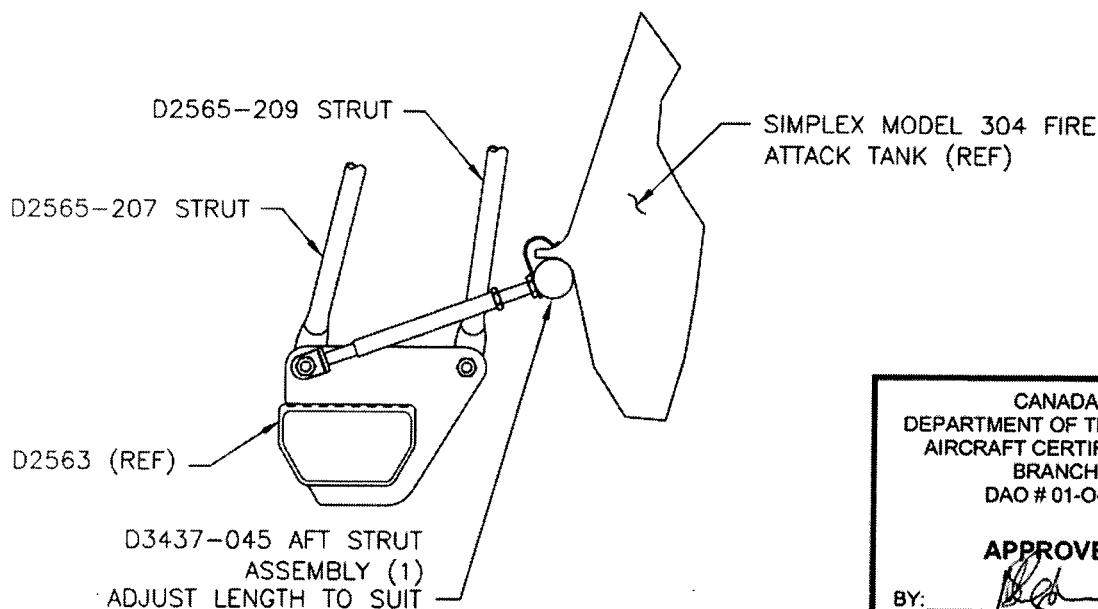
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9300	REV. B SHEET 6 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS



**DETAIL T**  
NOT TO SCALE



**VIEW U-U**  
NOT TO SCALE

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
<b>APPROVED</b> <i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
DATE:	05.08.12
CERT. NO.:	SH96-57
ISSUE NO.:	#5

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REFERENCE ONLY

5.2 D205-633-021/-022/-023/-024/-025/-026 Heli-Access Step  
(Simplex Model 304 Fire Attack Tank Compatible)

QTY -021	QTY -022	QTY -023	QTY -024	QTY -025	QTY -026	Part Number	Description
X						D205-633-021	Heli-Access-Step™ (LH), High Gear
	X					D205-633-022	Heli-Access-Step™ (RH), High Gear
		X				D205-633-023	Heli-Access-Step™ (LH), Extended High Gear (31")
			X			D205-633-024	Heli-Access-Step™ (RH), Extended High Gear (31")
				X		D205-633-025	Heli-Access-Step™ (LH), Extended High Gear (39")
					X	D205-633-026	Heli-Access-Step™ (RH), Extended High Gear (39")
4	4	4	4	4	4	D2022-101	SPACER
2	2	2	2	2	2	D2022-103	SPACER
				1	1	D2562-005	STRUT
1	1					D2562-011	STRUT
		1	1			D2562-013	STRUT
1		1		1		D2563	WELDMENT ASSEMBLY
1	1					D2565-101	STRUT
1	1					D2565-103	STRUT
1	1					D2565-105	STRUT
1	1					D2565-107	STRUT
1	1					D2565-109	STRUT
*1	*1					D2565-111	STRUT
		1	1			D2565-201	STRUT
		1	1			D2565-203	STRUT
		1	1			D2565-205	STRUT
		1	1			D2565-207	STRUT
		1	1			D2565-209	STRUT
		*1	*1			D2565-211	STRUT
				1	1	D2565-301	STRUT
				1	1	D2565-303	STRUT
				1	1	D2565-305	STRUT
				1	1	D2565-307	STRUT
				1	1	D2565-309	STRUT
				*1	*1	D3165-1	SUPPORT ARM
1	1					D3437-041	AFT STRUT ASSEMBLY
		1	1			D3437-043	AFT STRUT ASSEMBLY
				1	1	D3437-045	AFT STRUT ASSEMBLY
	1		1		1	D3438-042	WELDMENT ASSEMBLY
1	1	1	1	1	1	AN4-5A	BOLT
4	4	3	3	3	3	AN4-6A	BOLT
1	1	1	1	1	1	AN4-7A	BOLT
1	1					AN4-11A	BOLT
		1	1	1	1	AN4-12A	BOLT
1	1	1	1	1	1	AN4-14A	BOLT
1	1	1	1	1	1	AN44-7A	EYEBOLT
1	1	1	1	1	1	AN5-14A	BOLT
16	16	14	14	14	14	AN960JD416	WASHER
3	3	3	3	3	3	AN960JD516	WASHER
8	8	7	7	7	7	MS21042L4	NUT (or MS21042-4)
2	2	2	2	2	2	MS21042L5	NUT (or MS21042-5)

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Revision: B

Date: 07.08.21

Mar-22-13 1:28:28 PM

Page 1

**Accept**

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 5/22/13      **Start Qty:** 2.00      **\*2\***

**Required Date:** 6/05/13      **Req'd Qty:** 2.00      **\*~\***

**Cust Item ID:**

**Customer:**

**Reference:**

Approvals: Process Plan: MLJ Date: 13-05-22 Tooling: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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<b>Draw Nbr</b>	<b>Revision Nbr</b>
DSI9300	Rev B

100		0.00
<b>*100*</b>	DOCUMENT CONTROL	
DC	Memo <i>M. D.</i>	0.00
Document Control	Photocopy bluefile & type labels per PPPD205-633-022	CHG001

MLW 130718

110	Pick Kit	0.00
-----	----------	------

<b>*110*</b>		
Packaging	<b>Memo</b>	0.00
Packaging		

2x M.D. 13-07-18

120	QC4- 100% Inspect kits for completeness	0.00
-----	---	------

*120*			
QC	Memo		0.00
Quality Control			



